

NGSS Interim Assessments

Phyllis Lynch

Director of Instruction, Assessment,
and Curriculum

phyllis.lynch@ride.ri.gov

Erin Escher

Science and Technology Specialist

erin.escher@ride.ri.gov

Carolyn Higgins

STEM Specialist

carolyn.higgins@ride.ri.gov



Interim Assessment Overview

- What is the science interim assessment
- Implementation of the science interim assessment
- Use of the interim assessment in assessment system
- Reporting Information
- Bringing the science interim assessment to your district
- Key Takeaways



The Science Interim Assessment

- No cost to LEAs
- To support the vision and key shifts of NGSS, this assessment will have students apply knowledge and skills to topic specific, 3-dimensional, phenomenon-based items.
- The assessment uses the current Cambium Assessment portal where science teachers in grades 3-11 assign questions that are aligned to the content taught at that grade level.
- The reporting data and its use will inform teachers for future instruction while students can use it for reflection and growth of their current knowledge and skills.
- The bank continues to grow and currently includes:
14 ELEM PEs / 20 MS PEs / 20 PEs Each PE = 1 cluster item type



Implementation of the Science Interim Assessment

- Any teacher of science in grades 3 – 11 can implement the assessment.
- Teachers of grades 3-5 will have access to specific grade level test items.
- Teachers 6-8 and 9-11 will have access to items aligned to the standards that align with that grade-band.



Use of the Interim Assessment

- The interim assessments can be administered at the end of units or quarterly to inform student mastery of content learned.
- RIDE recommends that teachers consider administering items aligned to specific units of instruction as a pre and post-tests.
- Teachers may also review completed test items with students using the item rubrics as a tool for learning.
- Results can be examined with other teachers and leaders within the same district to support targeted approaches for improvement.



Reporting Information

Assessment Name	Test Group	Test Grade	Test Reason	Student Count	Average Score
Elementary School Physical Science - Energy	Interim	5	2019-2020 Year	1	0/8
Middle School Earth Space Science - History of Earth 1	Interim	8	2019-2020 Year	4	2/7
Elementary School Physical Science - Waves and Information	Interim	5	2019-2020 Year	2	4/11

Breakdown of student performance by scoring assertion

Student	Total Items	Total Items																						
Item Number		1	1-1 ⓘ	1-2 ⓘ	1-3 ⓘ	1-4 ⓘ	1-5 ⓘ	1-6 ⓘ	1-7 ⓘ	1-8 ⓘ	1-9 ⓘ	1-10 ⓘ	1-11 ⓘ	1-12 ⓘ	1-13 ⓘ	2	2-1 ⓘ	2-2 ⓘ	2-3 ⓘ	2-4 ⓘ	2-5 ⓘ	2-6 ⓘ	2-7 ⓘ	2-8 ⓘ
Max Points		13	1	1	1	1	1	1	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1
Everyone		4.2	0.57	0.57	0.31	0.29	0.71	0.14	0.12	0.12	0.08	0.06	0.53	0.37	0.33	2.88	0.33	0.41	0.2	0.41	0.31	0.67	0.51	0.04
Sample Student		8	1	1	1	1	1	0	0	0	0	0	1	1	1	6	1	1	1	1	0	1	1	0

Scoring assertions indicate specific student performances included in an interim assessment item.

Looking for Misconceptions and Areas for Improvement

Current Item: 1

Item & Score

Rubric & Resources

Details

Topic
Modular:
Science -
Middle
School
Earth Space
Science -
History of
Earth 1

**Content
Alignment**

Discipline: NGSS-MS-ESS: Earth and Space Science
Core Idea: NGSS-MS-ESS|ESS1: Earth's Place in the Universe
Performance Expectation: NGSS-MS-ESS|ESS1|MS-ESS1-4:
Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.

Rubric

Modular: Science - Middle School Earth Space Science - History of Earth 1

A full-credit (7 point) response requires

Student: LaMadrid, Summ...

Current Item: 1

Score: 4/7

Item & Score

Rubric & Resource

Scoring Assertion	Outcome
1. The student selected the range immediately more recent than their selection in the first part, providing some evidence that they understand how to use the fossil record to date geologic events.	✓
2. In part C the student pointed to a fossil they found in the column corresponding to the time period identified in the first dropdown, providing some evidence that the student understands how fossil evidence can be used to support claims about the timing of geologic events.	✓
3. The student selected the age associated with the column in which they placed fossil D in part B, providing some evidence of the ability to date an unidentified fossil based on the fossil record.	✓
4. The student selected the time period in Part D that corresponds to their hypothesis expressed in part C, providing some evidence of the ability to interpret observations based on scientific information.	✓
5. The student selected "C" and "F" for Column 1 in part A, providing some evidence of the ability to discern patterns given scientific information.	✗
6. The student selected "A" and "E" for Column 2 in part A, providing some evidence of the ability to discern patterns given scientific information.	✗

Use PE to know what practices and core ideas are being assessed

Use the scoring assertions to understand where additional support is needed



Bringing the Science Interim Assessment to Your District

- LEA District/Charter Leader completes application
- Agrees to participation assurances
- RIDE to hold virtual test administrator and teacher training sessions and provide nightly data feed to Cambium Assessment
- School test admins login to TIDE via ri.portal.com and create rosters for science teachers in their building
- Teachers sign-in to the portal and assign items as needed
- Students can have the same accommodations in place as they would for the state summative NGSA



Key Takeaways to Learning About Interim Assessment in Science

- Use the assessment items for quick formative checks on student proficiency toward NGSS science performance expectations.
- Inform future instructional strategies to differentiate instruction.
- Teachers gain insight to 3-dimensional NGSS design.
- Students interact with equitable assessment items to demonstrate what they know and can do.
- Students become familiar with NGSA assessment items and the platform.

Workshop sessions will be offered to teachers and district coordinators in August and September



[Apply here](#)

Thank you!

